Sonamp® 875D SE Application Notes

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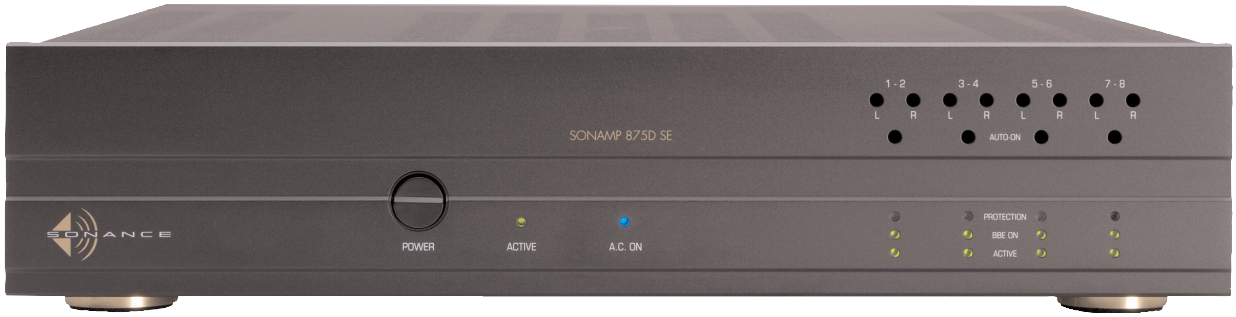

SONAMP 875D SE (FRONT VIEW)

The Sonamp® 875D SE offers many advantages over other power amplifiers. Here are the features and benefits that you should know about.

Applications

The 875D SE's design and features make it one of the most versatile amplifiers available. It can meet the needs of almost any installed audio situation.

The 875D SE should be used wherever:

- Space is limited (8 very beefy amplifiers are contained in a small package that's only 98mm — 3⅞" high). Two 875D SEs will provide 16 channels of hi-end, high-powered distributed audio while occupying less than 8" (196mm) of vertical space.
- The quality of sound is as important as the quantity of channels.
- Third-party serial control of the amplifier or an amplifier with built-in volume controls is desired.
- Sub-zones are needed in systems featuring a DAB1 or C4630 SE.
- Long-term reliability is an issue. (High-efficiency digital amplifiers run cooler and are less likely to break down over time from years of soaking in their own heat.)
- Four rooms of high-powered, high-quality distributed audio are needed.
- Two 300-watt per channel stereo amplifiers are required.

Who is the 875D SE Customer?

The 875D SE is designed for all three types of custom installers:

- Installers who perform basic distributed audio installations featuring autoformer volume controls.
- Installers who perform more elaborate installations featuring remote switching and central preamp control.
- Installers who install hi-end integrated systems featuring 2-way serial bus (RS-232) control.

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875D SE Features/Benefits

Feature: The 875D SE is a hybrid digital/analog design that utilizes Class T digital amplification and analog power supplies.

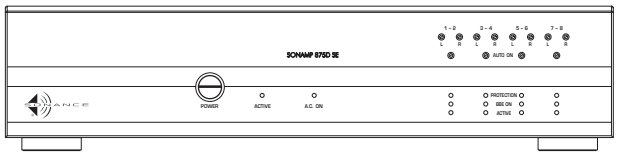
Benefit:

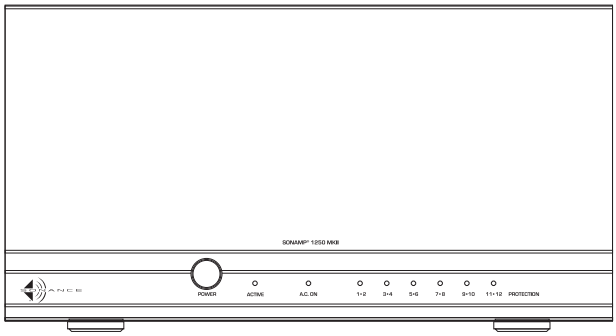
- High efficiency. At full output the 875D SE converts 93% of the input electricity into output power; only 7% becomes heat. Conventional amplifiers only turn about 65% of the input electricity into output power — nearly 35% becomes heat, which causes them to run hot and requires large amounts of area for heat sinks.
- Reduced AC power usage and a reduced carbon footprint.

Feature: The 875D SE packs the punch of a large conventional (Class A/B) amplifier into a very compact package.

Benefit:

- The 875D SE occupies only 2U of rack space, while a conventional amp with the same power output would occupy at least 5U of rack space





875D SE

- 600 watts total output @ 8 ohms (75w x 8)
- 2U high
- 850 BTU/HR heat output (full power)
- 47 lbs.

Conventional Amplifier

- 600 watts total output @ 8 ohms (50w x 12)
- 5U high
- 2868 BTU/HR heat output (full power)
- 55 lbs.

Comparison Between 875D SE (left) and Conventional Amp with Same Power Output (right)

Feature: Class T digital amplification circuitry.

Benefit:

- Great sound quality, featuring very low distortion, excellent control over the bass region and a clear and "sweet" midrange quality that some compare with audiophile tube amplifiers.
- After audio evaluations the 875D SE will sell itself to critical installers and careful listeners every time.
- This is one amp you can confidently place in the hands of installers who are audiophiles, and who have customers who are audiophiles (or simply care about good sound).

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Feature: The 875 D SE is the only digital amplifier that can be used with standard autoformer volume controls.

Benefit:

- It can be carried by installers whose primary focus is simple, volume-control based distributed audio systems.

Feature: The 875D SE is the only digital amplifier that is bridgeable.

Benefit:

- A single amplifier SKU can be used for different types of installations: In 8-channel mode for distributed audio applications, in bridged (4-channel) mode for high-power home theater or large room applications.
- Reduces the number of amplifier SKUs a dealer needs to carry.

Feature: The 875D SE combines digital audio circuitry with four analog power supplies.

Benefit:

- The proven analog power supply technology delivers plenty of current when the amp is asked to drive multiple speakers hard.
- Installers who have used the amp agree that "it rocks".
- Audiophiles generally agree that analog power supplies make for a better-sounding amplifier.

Feature: The installer-ready RS-232 interface is simple and intuitive.

Benefit:

- The 875D SE can be confidently installed by advanced system integrators without having to hire an outside programmer, saving costs and simplifying the installation process.
- Serial control code strings are brief, won't tie-up the data line and are listed in the instruction manual.
- Ready-to-use AMX and Crestron control modules can be downloaded from the Sonance website at no charge.
- The amplifier can provide real-time monitoring of current performance parameters to a 3rd-party controller via the RS-232 connection.

Feature: BBE® Sound Enhancement circuitry with individual controls for each zone

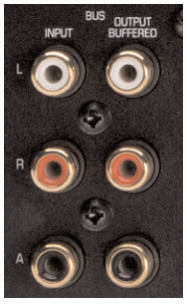
Benefit:

- Improves the sound quality of voice and music at low volumes; ideal for distributed audio systems.

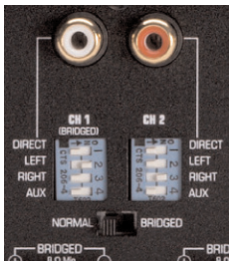
Feature: Left, right, aux and direct inputs for each channel

Benefit:

- Dramatically increases operational flexibility. For example, a single 875D SE could be utilized with four channels powering distributed audio speakers (via the left & right inputs) and the other four channels in bridged configuration, powering two large audiophile speakers (via direct inputs).
- DIP switches allow each channel to be individually configured.



Left, Right, Aux Inputs and Line Outputs



Direct Channel Inputs and Input Selector DIP Switches

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Feature: Buffered Line Outputs (on left, right and aux inputs)

Benefit:

- Installers can easily connect multiple amplifiers to a single source.

Feature: Auto-on (audio) triggering with individual zone activation

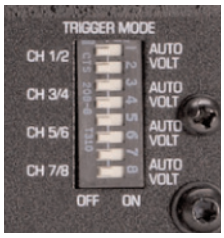
Benefit:

- Triggers selected zones ON/OFF in systems with in-wall autoformer volume controls.

Feature: Voltage triggering with individual zone activation

Benefit:

- Triggers selected zones ON/OFF in more sophisticated systems with 12V trigger stimulus.



Individual Zone Control Selector Switches

Feature: Progressive protection circuitry

Benefit:

- Zones in over-current condition will shut-down incrementally and then lock until the condition is corrected. Relays do not continually reset and burn-out.
- Over-temperature protection shuts the entire amplifier off until it reaches a safe operating temperature.

Protection, BBE and Zone Active Indicators

A Note About Cooling Requirements:

Although the 875D SE generates less heat than a conventional amplifier with similar power output, it does require adequate ventilation for proper operation:

- When rack-mounting, leave 1U of open space for every two amplifiers
- When placing the amplifier on a shelf, allow at least one inch of space above, below and on all sides of the amplifier chassis.
- Always use the supplied feet when placing the 875D SE on a shelf.

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Due to continuous product improvement, all features and specifications are subject to change without notice.
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